

## Abstract

Methods and systems are provided for leveraging markup language data applied to text or data for providing helpful actions on certain types of text or data such as names, addresses, dates, stock symbols, book titles, etc. As text or data is entered into a document, selected portions of the text or data, such as sentences, paragraphs or spreadsheet cell ranges, along with any associated markup language data (e.g., XML) are passed to an action dynamically linked library for obtaining one or more actions associated with markup language elements applied to the text or data. The text or data may be passed to a recognizer dynamically linked library (DLL) for recognition of certain data types. The recognizer DLL utilizes markup language data associated with the text or data to assist recognition and labeling of text or data. The recognition process may continue iteratively for a given text or data selection until no new text or data is recognized and labeled. After all applicable text and/or data is recognized and labeled, an action DLL is called for actions associated with the labeled text or data. Markup language data associated with recognized and labeled text or data is passed to the action DLL and individual action plug-ins to locate additional actions associated with markup language data that has been designated as equivalent to the markup language data associated with the labeled text or data.